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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/010,794	11/13/2001	Stanley Stewart Collins	43992/241147	5851

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EXAMINER

TORRES, ALICIA M

ART UNIT PAPER NUMBER

3671

DATE MAILED: 02/25/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/010,794

Applicant(s)

COLLINS ET AL.

Examiner

Alicia M Torres

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) ____ is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7 and 12-15 is/are rejected.
- 7) ☒ Claim(s) 4-6, 8-11, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Specification

1. The disclosure is objected to because of the following informalities:
 - the use of a dash in “trench-digging” is inconsistent;
 - the word “the” is missing from line 28, in page 2;
 - the word “a” is missing from lines 27 and 28, in page 4;
 - the word “to” is missing from line 5, page 7;
 - the word “machine” in line 13, page 7 should be plural;
 - the word “be” is missing from line 14, page 7;
 - reference number “18” has been used to refer to both lateral extending boundaries and lateral bonding planes;
 - the numbers “1” in line 2, page 12 should be written out.Appropriate correction is required.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show the existing structure for digging a trench (28) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

3. It appears the claims have been misnumbered, as claim 10 is missing. Appropriate correction is required.

DETAILED ACTION

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kaczmariski et al, hereafter Kaczmariski.

In regards to claim 1, Kaczmariski discloses a trench-digging machine for digging a trench under a structure comprising:

a frame (12) for operable connection to a transport machine (14), wherein the transport machine (14) defines a lengthwise extending axis and extends widthwise between a pair of lateral bounding planes; and

a digging implement connected to the frame (12) for digging the trench, wherein the frame (12) is connected to the transport machine (14) such that a center-line of the digging implement is capable of being laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding planes (see figure 5), thereby permitting the digging implement to be placed under the structure.

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In regards to claim 2, Kaczmariski discloses a trench-digging machine comprising an attachment plate (50) carried by the transport machine (14) and capable of connecting the frame (12) to the transport machine (14) at a plurality of predetermined positions such that the center-line of the digging implement carried by the frame (12) is adjustable with respect to the lengthwise extending axis of the transport machine (14) by connecting the frame (12) to the transport machine (14) at different predetermined positions.

In regards to claim 14, Kaczmariski discloses a trench-digging machine for digging a trench under a structure comprising:

- a frame (12) for operable connection to a transport machine (14), wherein the transport machine (14) defines a lengthwise extending axis and extends widthwise between a pair of lateral bounding planes;

- an attachment plate (50) carried by the transport machine (14) and capable of connecting the frame (12) to the transport machine (14) at a plurality of predetermined positions; and

- a digging implement connected to the frame (12) for digging the trench, wherein the attachment plate (50) permits a center-line of the digging implement carried by the frame (12) to be adjustable with respect to the lengthwise extending axis of the transport machine (14) by connecting the frame (12) to the transport machine (14) at different predetermined positions, and wherein the frame (12) and the attachment plate (50) are capable of being connected in at least one predetermined position such that the center-line of the digging implement is laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding plane (see figure 5), thereby permitting the digging implement to be placed under the structure.

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6. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Golden.

Golden discloses a trench-digging machine for digging a trench under a structure comprising:

A frame for operable connection to a transport machine (10), wherein the transport machine (10) defines a lengthwise extending axis and extends widthwise between a pair of lateral bounding planes; and

a digging implement (88) connected to the frame (26) for digging the trench, wherein the frame (26) is connected to the transport machine (10) such that a center-line of the digging implement (88) is capable of being laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding planes, thereby permitting the digging implement (88) to be placed under the structure.

7. Claims 1, 2, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura et al, hereafter Kimura.

In regards to claim 1, Kimura discloses a trench-digging machine for digging a trench under a structure comprising:

A frame (33) for operable connection to a transport machine (1), wherein the transport machine (1) defines a lengthwise extending axis and extends widthwise between a pair of lateral bounding planes; and

a digging implement (60) connected to the frame (33) for digging the trench, wherein the frame (33) is connected to the transport machine (1) such that a center-line of the digging implement (60) is capable of being laterally offset from the lengthwise extending axis to a

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position beyond the respective lateral bounding planes, thereby permitting the digging implement (60) to be placed under the structure.

In regards to claim 2, Kimura further comprises an attachment plate (12) carried by the transport machine (1) and capable of connecting the frame (33) to the transport machine (1) at a plurality of predetermined positions such that the center-line of the digging implement (60) carried by the frame (33) is adjustable with respect to the lengthwise extending axis of the transport machine (1) by connecting the frame (33) to the transport machine (1) at different predetermined positions.

In regards to claim 14, Kimura discloses a trench-digging machine for digging a trench under a structure comprising:

a frame (33) for operable connection to a transport machine (1), wherein the transport machine (1) defines a lengthwise extending axis and extends widthwise between a pair of lateral bounding planes;

an attachment plate (12) carried by the transport machine (1) and capable of connecting the frame (33) to the transport machine (1) at a plurality of predetermined positions; and

a digging implement (60) connected to the frame (33) for digging the trench, wherein the attachment plate (12) permits a center-line of the digging implement (60) carried by the frame (33) to be adjustable with respect to the lengthwise extending axis of the transport machine (1) by connecting the frame (33) to the transport machine (1) at different predetermined positions, and wherein the frame (33) and the attachment plate (12) are capable of being connected in at least one predetermined position such that the center-line of the digging implement (60) is

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laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding plane, thereby permitting the digging implement (60) to be placed under the structure.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 3, 7, 12, 13, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaczmariski in view of Mason.

In regards to claims 3 and 15, Kaczmariski discloses the device as applied to claims 2 and 14 above. However, Kaczmariski fails to disclose that the attachment plate is oriented at an angle offset from vertical such that the attachment plate faces downwardly.

Mason discloses a similar device wherein the attachment plate (unnumbered, see figure 7) is oriented at an angle offset from vertical such that the attachment plate faces downwardly.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the downwardly facing attachment plate of Mason on the trenching attachment of Kaczmariski in order to allow for trenching at a desired depth.

In regards to claims 7, 12, and 13, Kaczmariski discloses a trench-digging machine comprising:

an attachment plate (50) for operable connection to a transport machine (14) which defines a vertical axis;

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a frame (12) connected to the attachment plate (50); and

a digging implement connected to the frame (12) for digging the trench;

wherein the transport machine (14) defines a lengthwise extending axis and extends widthwise between a pair of lateral bounding planes, and wherein the frame (12) is connected to the transport machine (14) such that a center-line of the digging implement is capable of being laterally offset from the lengthwise extending axis to a position beyond the respective lateral bounding plane, thereby permitting the digging implement to be placed under the structure, as per claim 12;

wherein the attachment plate (50) is capable of connecting the frame (12) to the transport machine (14) at a plurality of predetermined positions such that the center-line of the digging implement carried by the frame (12) is adjustable with respect to the lengthwise extending axis of the transport machine (14) by connecting the frame (12) to the transport machine (14) at different predetermined positions (see figures 3-5), as per claim 13.

However, Kaczmarski fails to disclose that the attachment plate is oriented at an angle offset from vertical such that the attachment plate faces downwardly.

Mason discloses a similar device wherein the attachment plate (unnumbered, see figure 7) is oriented at an angle offset from vertical such that the attachment plate faces downwardly.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the downwardly facing attachment plate of Mason on the trenching attachment of Kaczmarski in order to allow for trenching at a desired depth.

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Allowable Subject Matter

10. Claims 4-6, 16, and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 18-20 are allowed.

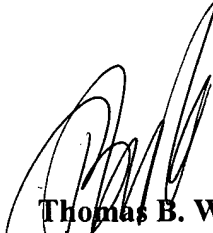
Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Holloway et al, Sing, and Allen have been cited as of interest.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 703-305-6953. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 703-308-3870.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 703-305-1113. The fax number for this Group is 703-305-3597.


Thomas B. Will
Supervisory Patent Examiner
Group Art Unit 3671

AMT
February 13, 2003